

## ***Conscientization, Dialogue and Collaborative Problem Based Learning***

*Andrew Armitage \**

### **ABSTRACT**

*It has been argued that Paulo Freire's concept of conscientization, where critical awareness and engagement are central to a problem-posing pedagogy, provides the philosophical principles to underpin Problem Based Learning (PBL). By using dialogue groups and a combination of learning strategies to discover the nature of a problem, understand its constraints, options, and multi-voiced perspectives, students can negotiate the sociological nature of its resolution and how competing perspectives may inform decision-making. This paper will first present the background of PBL, before it introduces and argues for reflective and reflexive learning environments founded within dialogical practices. It then provides tales from the field that illustrate how conscientization is enacted in the classroom, before considering implications and the Ten Principles of Critical Learning' for reflective and reflexive practice. It concludes by arguing that conscientization and the dialogical process are central to PBL in order to engage the individual voice, foster democratic practices, and for the creation of shared meanings and understandings.*

**Key words:** *Conscientization, Dialogue, Problematization, Reflexivity, Constructivism*

### **INTRODUCTION**

Problem Based Learning (PBL) unlike traditional learning actively engages the student in the construction of knowledge (see, for example, Wingspread, 1994; Boyer, 1998) where the role of the tutor is to guide and challenge students rather than to transmit knowledge (Dolmans *et al.*, 2005; Hmelo and Barrows, 2006). An essential aspect of PBL is feedback and reflection on the learning process where group dynamics are central components to the creation of knowledge. Learning is therefore a self-regulatory process of dealing with the conflict

---

\* Andrew Armitage, Anglia Ruskin University, Bishop Hall Lane, CM1 1SQ Chelmsford, UK, Email: [andrew.armitage@anglia.ac.uk](mailto:andrew.armitage@anglia.ac.uk)

between existing personal models of the world and new insights an individual encounters, being the reconstruction of new representations of reality, meaning-making and its negotiation through cooperative social activity, discourse, and debate (Fostnot, 1996). It has also been argued, that PBL is not a particular way or method of learning but rather one that takes on a variety of forms (Boud, 1985; Barrows, 1986).

Boud (1985) has suggested that PBL differs according to the context and disciplines it is practiced within, where students bring their personal experiences to, and take responsibility for their learning journey, and is a learning space where the integration of theory and practice takes place and the tutor becomes less directive and more facilitative. Practice Based Learning also focuses on the learning process rather than product of knowledge acquisition, and an emphasis upon communication and interpersonal skills. Savery and Duffy (1995) define the learning goals of PBL that go beyond those of self-directed learning, content knowledge and problem solving to include competence in the essential skills of literacy and numeracy, information finding and retrieval, goal setting, time management, question-asking behaviour, critical thinking and comprehensive self-monitoring and evaluation. This implies that self-directed learning assists students to become sensitive to their learning needs and abilities in locating and using appropriate information resources (Candy, 1991). This has been argued as being central to the process of PBL for clarifying and agreeing on terms and concepts that are unclear, defining the problem and reviewing terms which are in need of more explanation, brainstorming to create and evaluate potential hypothesis, generating and prioritizing learning objectives, the division of workload, private study time to research objectives, reporting information, and creating an explanation and synthesis of new information in relation to the problem (Schmidt, 1983). According to Barrows and Tamblyn (1980) PBL requires individuals to understand the concepts, rules and principles of problem solving, and the hypothetico-deductive inference skills to generate hypotheses and formulate solutions (Gagné, 1985) enabling students, working in groups to identify and develop viable learning solutions through self-directed learning in order to address complex, real world situations, which have no “right” answer, and where the tutor acts in a facilitative capacity. This according to bell hooks (2010, p.43) is central to an engaged pedagogy that:

‘produces self-directed learning, teachers and learners who are able to participate fully in the production of ideas....Learning and talking together, we break with the notion that our experience of gaining knowledge is private, individualistic and competitive. By choosing and fostering dialogue, we engage mutually in a learning partnership’

Dialogue is central to Paulo Freire’s concept of *conscientization* (Freire, 1972), which Barrett (2001) has argued provides the philosophical principles to underpin PBL, this being a problem-posing pedagogy where education is the practice of freedom and where critical awareness and engagement of the learning process are actualised through problematization and dialogue (bell hooks, 2010). Problematization is a process of defamiliarization of

common sense (myth), where an individual considers their situated reality and invites other people to transform their situation. For Freire, problematization is the first step of critical pedagogy using dialogue to demystify a problem in order to challenge taken for granted knowledge, allowing new viewpoints, consciousness, reflection, hope, and action to emerge (Crotty, 1998). As Montero (2009:79) notes ‘As a critical process, problematization generates disagreement, doubts, and discussion, as simultaneously, it starts a process of consciousness mobilization leading to *conscientization*, inducing transformations in the modes of understanding certain phenomena’. Furthermore, value of *conscientization* is not only about acquiring skills, becoming a self-regulated learner, and the acquisition either practical skills and competences, but rather its concerns are focused upon individuals becoming critical, enlightened citizens capable of critically engaging with, and transforming the world. It is a critical enterprise that aims to destabilise and question deep rooted disciplinary knowledge, assumptions, and ideas. In essence, *conscientization* challenges the fundamental principles upon which paradigmatic knowledge, its values, and rhetorical stance is founded upon. It can therefore be argued that PBL takes a social constructivist approach to learning where learner’s and tutors co-create knowledge together in participative and collaborative learning environments. Furthermore, through social negotiation with group members, students have opportunities to compare and evaluate their understanding of subject matter with each other through what Barrett and Moore (2011) describe as dialogical knowing, this they claim being central to collaborative PBL practices. It will therefore be argued that reflective and reflexive learning environments founded within dialogical practices are central to the process of *conscientization*, before providing tales from the field that illustrate how it is enacted in the classroom. The implications of PBL and the *Ten Principles of Critical Learning*’ for reflective and reflexive practice will follow, before concluding that *conscientization* and the dialogical process are central to PBL in order to engage the individual voice, create democratic practices, and for the creation of shared meanings and understandings for those who take part in the PBL process.

### **CONSCIENTIZATION, DIALOGUE AND PROBLEM BASED LEARNING**

‘it is only by means of an education that does not separate action from reflection, theory from practice, consciousness from the world, that it is possible to instil a dialectic form of thinking that will contribute to man’s integration as a subject into historical reality’

*Paulo Freire, Quelques idées insolites sur l’éducation*

*Conscientization* is the process whereby an individual becomes engaged with transformative, democratic, and humanistic pedagogical practices, and are not mere receptacles of reality but who as ‘knowing subjects achieve a deepening awareness both of the socio-cultural reality which shapes their lives and of their capacity to transform that reality’ (Freire, 1972:51). As

Freire notes *conscientization* is where individuals gain the capacity to transform their lives as they become aware of their ability to challenge taken for granted practices, and is a process that enables them to liberate and take control of their own destinies. Freire contends that people must first critically recognize how their reality comes into being so that their ‘transforming action can create new realities, which makes possible a fuller humanity’ (Freire, 1972, p.29) and where an individual ‘exists *in* and with *the* world’, this being essential to transformative, democratic, and humanistic pedagogical practices (Freire, 1972, p.51). Freire (1972) describes the process of *conscientization* as having three stages. The first is magical awareness where individuals explain the events that shape their lives in terms of forces and powers beyond their control, and understanding. The second stage is naïve awareness where individuals, although not passively accepting their situation, nevertheless still accept the values, rules, and social order they find themselves in, but still have an incomplete understanding of their lived situation. The third stage is critical awareness or consciousness whereby individuals look more critically at their lived reality, and start to question the values, rules and expectations of passed down by those who oppress, have power and control over them. As such, *conscientization* is not purely a process of individual development; it is also located within the context of the collective, in mutually supportive horizontal relationships. Gajardo (1991, p.40) notes that *conscientization* introduces notions of reflexivity into the learning process, and that a *conscientized* person is the ‘subject of the processes of change, actor in the management and development of the educational process, critical and reflexive, and capable of understanding his or her reality in order to transform it’. Furthermore, Freire’s conception of *conscientization* is not just verbal interaction, as traditional education is, this being regarded as ineffective and the mono-directional transmission of knowledge from teacher to student via the so-called “banking” method, but rather it can only be achieved through a dialogical encounter, where the student is fully involved in the educational process (McCowan, 2006). For Freire (1972, p.57) the “banking” method of education emphasises permanence and becomes reactionary, whereas problem posing education does not accept neither a ‘well behaved present nor a pre-determined future....it roots itself in the dynamic present and becomes revolutionary’. Freire (1970 and 1972) argues that *conscientization* is attained through the dialogical process and critical reflection, which facilitates a critical pedagogy, which is a problem posing education that focuses upon the concerns of the student-teacher relationship, the learning context and the process of learning. Freire is emphatic that learning is founded upon *praxis*, this being a dialectic process of reflection and action, stating that ‘discovery cannot be purely intellectual but must involve action; nor can it be limited to mere activism, but involve serious reflection’ (Freire, 1972, p.47). As Bolton (2001) notes reflective practice is a dynamic and challenging process requiring those who partake in its process to question through dialogue, their personal and professional practices, and the impact these will have on wider society and individuals they interact with (see also, Lehman, 1988; Power, 1991). Barrett and Moore (2011, p.115) have introduced within the context of PBL, the concept of dialogic knowing, which is ‘a concept that is at the heart of problem-based learning and a key idea underpinning all good learning’. They go on to note that dialogic

knowing is where people create and re-create knowledge together, and argue that students and tutors can maximize their potential for the emergence of dialogic knowledge in the context of PBL tutorial settings by talking and listening to each other, by sharing ideas, by confronting divergent views, and by approaching problems in interactive, collaborative, communicative ways. Furthermore, dialogic knowing is the construction and the creation of democratic social relations by co-constructing knowledge through collaboration, whereby individuals embrace shared meanings in the PBL learning process (Barrett and Moore, 2011). Savin-Baden and Major (2004, p.74) have also noted that dialogic knowing is essential to the reflexive team, this being an:

‘...organizing principle, and thus it involves explicit shared reflection about the team process and findings of the learning needs of the team.... Students in such teams are expected to feel able to point to unease connected to both with their role within the team, the relationship between their individual concerns....and the nature of support in the team’

Calas and Smircich (1992:240) have also advanced the idea of reflexivity that ‘constantly assesses the relationship between “knowledge” and the ways of “doing knowledge”’ and where ‘we contextually recognise the various mutual relationships in which our knowing activities are embedded’ (Steier, 1995, p.163). This approach to learning involves explicit shared reflection about the team process and findings of the learning needs of the team, rather than masking the paradoxes and conflicts that emerges at almost every stage in most learning teams. As such, individual students by making themselves and their learning the focus of analysis are able to value alternative perspectives of the world, and dialogue is regarded as being central to the process of deconstruction and reconstruction of theirs and others’ lives in order to make sense of roles and relationships (Savin-Baden and Major, 2004). According Roebuck (2007) reflexive practice together with reflective practice can be described as a process of inquiry which facilitates appreciation and understanding of contextualised views (outside the learners own experience), a deeper learning experience, the development of ideas, and conditions for actual change.

Cunliffe (2004) has noted that reflexivity is where students and the teacher are engaged in a process where their roles are more equal and where ‘Critically reflexive practice embraces subjective understandings of reality as a basis for thinking more critically about the assumptions, values, and actions on others’. Cunliffe (2004, p.407) claims that reflexive practice is important to management education, because ‘it helps us understand how we constitute our realities and identifies in relational ways, and where we can develop more collaborative and responsive ways of managing organizations’. Cunliffe (1999, p.8) suggests individuals construct social realities, and that they we need to recognise critical management suppositions and reframe them in the ‘context of everyday lived experiences and our ideas of learning’ and that ‘organisational realities and identities are interwoven in a continuous

process of mutual construction; we co-construct our realities in our conversations (Prasad and Caproni, 1997). Prpic (2005) claims that reflexive practice is a three stage process whereby individuals examine, refine, attain knowledge, self-awareness, and how they operate in their professional work settings. The first stage is the intra-view stage where an initial reflection process takes place and the participant (student) attempts to find a deeper understanding of a new concept, an experience or of self. Understanding and meaning are acquired through active and deliberate individual reflection facilitated through contemplative thinking, and the individual comes to see themselves differently in the world, and that the views of the collective. The second stage is the inter-view stage where active discussion takes place, Here, the student may find new assumptions about knowledge, and where the self and the world are challenged. This requires a commitment to understanding other views, whereby dialogue is central to this process. Third stage is where the views of the individual or collective are considered (students and teachers together), and requires individuals to actively reflect on their initial thought in light of the discussions that have taken place in the inter-view stage. Barrett (2005, pp.21-22) argues that reflexivity and dialogic knowing is 'where teachers and students co-construct knowledge and shared understandings', and have implications for PBL practices 'where students are considered to be active agents who engage in social knowledge construction'. Problem Based Learning situates students in simulated and working professional contexts that address policy, process, and ethical problems, and it has been argued that purposefully designed and successful small group learning facilitates the development of a learning environment that supports and promotes both cognitive and meta-cognitive development and small group work is an integral part of the PBL approach to achieve learning outcomes (Newman, 2004; Benson *et al*, 2001). Implicit in the design of PBL is small group work where co-operation between individuals together with the tutorial process, and the use of scenarios, help students to learn how to learn in groups and learn how to anticipate, prevent, cope and deal with the difficulties that they will experience working in this way (Newman, 2004).

According to Newman (2004) small group work enables students to take on a variety of roles, for example, to facilitate or chair discussions and debates, research materials, or be responsible for the collation of ideas and solutions that are to be presented to peers in plenary sessions. This emphasises the need that students are required to take responsibility for their learning process in a group situation, the development of facilitation skills, this being an important part of their roles in a supportive environment (Benson *et al*, 2001). Whilst there are differing opinions as to the size of PBL group work, it has been argued that communication skills, the development of knowledge and collaboration are best achieved with five and ten group members (Myers, *et al*, 2000; Benson *et al*, 2001). This suggests that PBL assists in the process of creating meaning and building personal interpretations of the world based on experiences and interactions with others, and guides the student to bring theory and practice together during their learning journey (Edens, 2000). Therefore the beginnings of a critical and reflexive pedagogy commences in praxis where students become

*conscientized*, and acquire the skills of the “collective dance” to enable problem based learning to take place. As Lähteenmäki and Uhlin (2011, p.145) note ‘It is important to remember that learning always happens in social, cultural, and political contexts’ and Savin-Baden and Major (2004) have also shown how group members have to take into account the holistic situational context of their relationship to other people and place. It can therefore be argued that self-emancipatory and self-empowering practices are essential characteristics of students being able to take control of their own situated reality (Bolton, 2001), and as Montero (2009:77) notes:

‘If participation is the cornerstone for methods development in community-orientated work with a liberating aim, dialog is its complementing aspect. It introduces polyphony as the multiple voices of the participants are heard and responded to’.

As such, dialogue brings together the teacher and the student in the joint act of knowing and re-knowing the object of study, where instead of transferring knowledge statically, as a fixed possession of the teacher, it demands a dynamic proximation towards the object, and is a learning space where people create and recreate acts of knowledge through the process of *conscientization* (Freire, 1972). Furthermore Shor (Shor and Freire, 1987, p.49) has argued that dialogical learning leads to illumination because:

‘Traditional methods, the transfer-of-knowledge approaches are burdensome precisely because they can’t work! [and] The dialogical method is work also, but it holds out a potential of creativity and breakthrough which gives it unusual rewards, mutual illumination’

Mutual illumination has resonance with Barrows (1996), who within a framework of instructional pedagogical methods, has characterised PBL as [student-centred learning](#) that occurs in small groups, where tutors act as facilitators or guides, and where a problem is the focus and stimulus for learning, to stimulate the development of problem solving skills, and where new knowledge is obtained through [self-directed learning](#). Students are encouraged to take responsibility in PBL for the group dynamics in order to organise and direct the learning process with the support from a tutor to enhance content knowledge, and to develop negotiation and communication skills, critical thinking, and collaborative practices.

### ***Conscientization and Problem Based Learning: Tales from the field***

‘The task of the dialogical teacher.... working on the thematic universe.... is to “re-present” that universe to the people from where she or he first received it – and “re-present” it not as a lecture, but as a problem’.

Paulo Freire, *Pedagogy of the Oppressed*

What follows are four tales taken from classroom practice from students who were attending postgraduate management qualifications, and were in full time employment, in both the private and public sectors. Students in groups were asked to problematize and share through dialogue, topics and problems that were confronting them, (what Freire called “reading circles”) so they could explore themes, issues, and their lived reality central to their organisational and professional contexts and experiences. These themes were then decoded, whereby students through their discussions with other group members become more critically aware of their daily problems, so they can gain a greater understanding of their lived reality of the world, and to re-consider how they might deal with their and others’ situations, and as a way to mediate, change and deal with the issues that confront them in the workplace. As Ryan (1974, p.36) notes ‘In this way, little by little, by means of generative words, they stimulate the creative imagination’. Underpinning this approach was Paulo Freire’s participatory action research (PAR) method as a means to facilitate the process of *conscientization* to enable students to problematize and explore their social, political, and cultural contexts, and help them move towards what he called critical consciousness (Freire, 1970, 1972, and 1974). As Montero (2000, p.134) notes, PAR is the key to the practice of liberation and critical consciousness, stating that:

‘a methodological process and strategy actively incorporating those people and groups affected by a problem, in such a way that they become co-researchers through their action in the different phases and moments of the research carried out to solve a problem’.

The tales illustrate how questioning in reflexive groups (Savin-Baden and Major, 2004) leads students to question how their initial assumptions about their professional realities are challenged through dialogue with their fellow students and their tutor. As Läähtenmäki and Uhlin (2011, p.146) have noted PBL is where:

‘Everyday learning is an important part of the context and plays a central role in the students’ learning alongside organised formal education. In the framework of curriculum design, the learner builds new knowledge on the foundations of all the knowledge he/she possessed before the education began’

### **Tale 1**

One of the challenges facing educators at the beginning of a programme of study is to expose students to issues that go beyond the boundaries of their profession (see, for example, Boyce, 2004 and James, 2006 concerning critical education perspectives). This requires students to move out of their comfort zone and be confronted as to how events beyond their organisational settings affect their professional roles as practitioners. The use of readily available information from the media is an approach that can make an “instant impact” upon students’ awareness of how issues impact their professional practice (Armitage, 2010).



Students in small dialogue group choose a current affairs issue of interest from a selection of financial and economic journals provided. They choose an issue of mutual interest and then identify the underlying problem it evokes. They then work individually on this for an hour in order to construct their individual conceptualisation of the problem, before regrouping in to dialogue groups to discuss their perspectives of the problem together in a shared collaborative experience, for example, issue considering its political, cultural and social significance, and what impact it has on their professional and organisational practice. This is summarised and feedback to other peer groups.

This exercise achieves several outcomes. First, it invites students to dialogue in an open, safe environment with each other, an important aspect at the beginning of a programme of study. Second, it shows students there is ‘no right answer’, but rather a need to justify themselves in the gaze of their peers. This also provides an opportunity for students to become reflective and critical thinkers and illustrates that the ownership of opinions and knowledge is not solely the ‘gift of the teacher’ or of textbooks. Third, it creates an authentic learning environment via inductive engagement with the world and that it is the understanding of principles rather than a focus upon facts that is important in coming to terms with social, political and cultural meanings of the issues discussed. This suggests that critical reflection and the exposure through dialogue to the multiple contents which subject material is situated fosters critical thinking, curiosity, motivation to learn, and results in a deeper learning experience (Biggs and Moore, 1992; Krause, 2005; Roebuck, 2007).

## **Tale 2**

Teaching is just not the transferring of knowledge it is about questioning personal assumptions, and coming to terms with self-doubt, to make the uncertain certain (Freire, 1970). For students to learn ‘how the economy works’ requires an approach that not only challenges them to think differently, but also gives them the ability to question how it functions (Armitage, 2010). As Montero (2009, p.80) states ‘to problematize is to generate situations in which the people involved are faced to review their actions and opinions about daily life events considered not only as ordinary circumstances, but also as inevitable because of their attributed essential way of life’. Students are asked to evaluate and provide critical feedback on the following questions: What do you understand by interest rates? How does it affect your life? What impact do they have on the economy? What if they rise or fall? What impact do they have on your organisation? What solutions can you provide to make interest rates more socially equitable? This requires the “teacher” to respond to questions from students who are uncertain of this “alien” topic in an open Socratic manner (Armitage, 2010). Students discuss the topic and build knowledge through dialogue between them and the tutor by means of divergent questioning (Biggs and Teng, 2007). A class discussion follows by the use of convergent questioning by ‘building from the known’ (Biggs and Teng, 2007) as to how the economy works. Students can be quite surprised how close their “naive” thinking coincides with the “official” version as given, for example, in a textbook. This approach

shows students how they can take control of their personal learning journey and reveals also how the economy works through political and cultural historical contexts, and the competing values and interests of society, commerce, and industry.

### **Tale 3**

For Human Resource Management student's ethics appears to be a straightforward subject, being seen as a utilitarian set of principles that are couched in policies and regulation. Instead of presenting them with a text book definition of ethics, a real life case study is given to students so they can problematize the ethical dilemmas it contains, and so they can grapple with the issues that have meaning to them without having to first grasp any associated terminology (Armitage, 2010). They are divided into three groups. Two of the groups are then given one of the following motions, which they are asked to defend: Ethics has no place in and HRM practices; Ethics is central to HRM practice. The third group acts as the audience. The two groups are then asked to discuss and debate for an hour in their groups the motion allocated to them before being asked to present their defence in a class debate. Three people from each of the debating groups are selected to give a five minute defence in turn of their allocated motion. The third group, the audience, are asked to debate both motions prior to the class debate in preparation to ask questions to each of the two debating groups after they have presented their arguments. The tutor's role is to act as the chair, time keeper, to listen, and observe interactions in preparation for their summary of proceedings in a plenary session after the debate, in order to attain what Schmidt and Moust (2000, p.43) term "cognitive congruence" whereby the tutor is able to express themselves in terms of their of students' understanding, this they claim being an important part of PBL, stating that:

‘If a tutor is not able to frame his or her contribution in a language that is adapted to the level of understanding of the subject matter being studied, these contributions will go unnoticed. In addition, cognitive congruence assumes sensitivity of the tutor concerning the difficulties of students may come across while dealing with a problem or with subject matter relevant to that problem’.

The discussions can be robust and produces a learning environment contextualised within their professional experience and leads them to question: What happens if ethical values conflict with legal requirements? What happens if my personal values clash with the organisation? How would I handle this in my workplace? What emerge from the debate are issues concerning duty, responsibility and moral relativism, legalism versus morality, cultural dysfunction, bullying, and human character. The group presentation and feedback produces further discussion as competing perspectives enter the debate. Whilst these might appear to be "obvious" outcomes, it is important to realise how students have discovered these issues by their own reasoning through dialogical exchanges prior to them being introduced to ethical theories. The interaction between students is central to the creation of new understandings,

and to develop ‘clear and compelling ethical positions’ and create ‘feelings of obligation on the part of others’ (Water, 1988:179).

#### **Tale 4**

The example described here used a combination of images and dialogue groups together with the participatory visual methods of Vince and Warren (2012) and Sullivan’s (2005, p.215) framework of “Visual Knowing” where ‘information is encountered, and critiqued to create representations that assist further inquiry’ in preparation for studying their organisations and producing clearly structured questions for further investigation. As Barrett *et al* (2004, p.18) note designing high quality problems is ‘a key success factor for PBL’ as this provides the ‘starting point and the driving force for learning’. Students were invited to consider a single question posed by the tutor: What is your organisation like? Students were asked to produce picture images of how they felt or perceived their organisational reality, and then present them to each other in dialogue groups of 4 to 6 fellow students (see, for example, Armitage, 2012). This approach gave student’s freedom to interpret and problematize the question using their personal experiences before ‘Responding to information in an insightful fashion through constructive dialogue [where] private views need to enter into public discourse, for it is within the interpretive community of the field that alternative visions are most keenly felt’ (Sullivan, 2005, p.215). This allowed them to reveal hidden (suppressed?) feelings of the silent culture of their organisation (see, for example, Freire, 1972), as one student stated:

‘This process is a cathartic experience – I have never thought of my organisation in terms of image work. Discovering who holds power and who “holds all the cards” in my organisation is something I do not consciously think about in the hurly-burly of my busy day.

Some students’ “secret views” and emotional reactions were also articulated not only through their images, but also in how they described this to other students in their dialogue groups. For example, one student drew an image of their organisation in the form of a crucifix, and when asked why by a member of her dialogue group replied:

‘This is how I feel – nailed to a cross, mocked, and left for dead. It’s a kind of slow death as the organisation first suffocates, and then sacrifices those who do not have any form of hitting back, or are not empowered to think for themselves. For me to represent my organisation like this is quite shocking to me as I am seeing the organisation through an emotional lens’

For other students, producing an image picture was a liberating experience, providing an opportunity of free expression. One student, who worked in the public sector, drew an image of a two-lane racetrack as representing their organisation, and when asked what this represented by a member of his dialogue group replied that:

‘It’s the old meeting the new - you know, where the workforce is running at different speeds. Some staff are just there for the money, until they retire, sitting in dead man’s shoes so to speak – their pension is their reason to exist. Others, the younger members of staff are those who want change – they have all the ideas, the innovative projects’

The concept of an organisation as creating a “brick wall” also featured in one of the images. This student, who worked in the National Health Service, when asked about her image, conceived her working environment as being one that stopped new ideas from rising to the top – a brick wall separated the management from the “rest”:

‘It’s so frustrating - the managers sit behind this brick wall, make decisions, and throw out commands, issue new procedures, and rules, and the meetings they attend, well it’s all blah, blah, blah. They can’t see the chaos they have created below them; in fact I don’t think they care”.

### **IMPLICATIONS FOR PROBLEM BASED LEARNING**

Dialogue, as described in the forgoing tales from the field is central to the learning process, and requires a PBL pedagogy that challenges students to reflect, and become reflexive of the power relations underpinning the social context they inhabit as students, and as practitioners. As Barrett and Moore (2011, p.119) note:

‘We argue that the principle of creating more democratic social relations is a fundamental prerequisite to dialogic knowing. Democratic social relations mean that there is a level of respect, openness, reciprocity, and equality that facilitates students to actively listen to other students’ idea and to express their own freely’.

Barrett and Moore (2011, p. 119) note that a barrier to dialogic knowing is authoritarianism, where ‘one person dominates, sets the agenda, and makes decisions’, and argue that that PBL decentres tutors from their dominant and powerful position in the learning process, and ‘moves students away from the passivity and disempowerment to which a power imbalance can give rise’, and as Valentin (2007, p.179) notes ‘creating dialogue calls for an active role on behalf of the tutor: mediation, posing problems, encouraging participation’. As illustrated in the forgoing tales from the field PBL cannot be taught from a “text book”, and has to adopt what Marx (Easton and Guddat, 1962, p.212) advocated as a ‘relentless criticism of all existing conditions, relentless in the sense that the criticism is not afraid of its own findings and just as little afraid of conflict with the powers that be’ in its quest for a pedagogy that engenders integrity in the learning process, an approach advocated by bell hooks (2010, p.21) as an engaged pedagogy that:

‘emphasises mutual participation because it is the movement of ideas, exchanged between everyone in the classroom. This process helps establish the integrity of the teacher, while simultaneously encouraging students to work with integrity’.

This it can be argued is critical for PBL group dynamics and requires tutors to create spaces for critical enquiry and reflection if they are to include and make better use of students’ experiences and competencies that they bring to the learning process. As Valentin (2007) argues group processes and their dynamics in the early stages of a learning programme are essential to a learners understanding and Dehler *et al* (2001) advocate for the reversing of the teacher-student relationship where students are encouraged to take responsibility for their own learning. It is therefore suggested that if PBL environments are to embrace the principles of *conscientization* and dialogical learning approaches then the ‘*Ten Principles of Critical Learning*’ of Armitage (2010) might be adopted as a set of guiding principles for reflective and reflexive practices at the beginning of educational programmes as follows:

**Principle 1:** Learning and teaching is not merely the transference of knowledge.

**Principle 2:** Learning requires respect, dignity and equity of treatment of students towards fellow students, tutor towards students and students towards tutor.

**Principle 3:** Learning requires we take control and responsibility for our personal learning journey.

**Principle 4:** Learning requires we create knowledge together through critical discourse and dialogue.

**Principle 5:** Learning requires that we discover how the world works; it is not merely the acquisition of facts.

**Principle 6:** Learning requires transparency, accountability and justification of our opinions before our peers.

**Principle 7:** Learning requires we develop and build relationships through shared understandings by creating a learning community founded on mutual trust and dialogue.

**Principle 8:** Learning to be authentic requires immediacy and relevance to our political, social and cultural contexts.

**Principle 9:** Learning requires the provision of a safe learning environment is fundamental in making us aware of our and others’ feelings and emotions.

**Principle 10:** Learning requires we learn to listen, suspend our prejudices and not pre-judge others.

## CONCLUSION

Problem Based Learning is an approach that requires both the tutor and the student to become *conscientized* in the transformational dialogue of their socio-historical-political worlds of *self* and *other*, as Gustavsen (2006:19) notes ‘All participants have the same status in the

dialogic arena'. This requires a reflexive turn that is located within the social context of PBL practices and the power relations underpinning the personal relationships they are enacted within. Problem Based Learning is not just the collection of facts and figures that are to be submitted to analysis using pre-determined methods and procedures, but rather demands that both tutors and students to submit themselves to a process whereby they acquire new knowledge through the dialogical process. If new imaginative awakenings are to be sought, and embodied within PBL practices, then its focus needs to reach beyond the confines of problem solving and the acquisition of professional skills. The process of *conscientization* as the foundation where students can challenge and re-construct their personal and professional practices, and assumptions must be embedded within a PBL pedagogy. This will enable students to be better prepared to meet the complexities of their professional roles, not only as a means to help them be better problem solvers, but also as moral agents and decision makers situated in their political, social, and cultural realities.

## References

- Armitage, A. (2010) From sentimentalism to a critical HRM pedagogy, *Journal of European Industrial Training*, Vol.34, No.8/9, pp.735-752.
- Armitage, A. (2012) A Methodology of the Imagination, *Journal of Business Administrative Research*, Vol.1, No.1, pp.1-12.
- Barrett, T. (2005) *Handbook of Enquiry & Problem Based Learning*. In Barrett, T., Mac Labhrainn, I., Fallon, H. (Eds). Galway: CELT,
- Barrett, T. and Moore, S. (2011) Students Maximising the Potential of the Problem-based Learning Tutorial: Generating Dialogic Knowing. In Terry Barrett and Sarah Moore (Eds.) (2011) *New Approaches to Problem-Based Learning*, Abingdon: Routledge.
- Barrett, T., Cashman, D. and Moore, S. (2011) Designing Problems and Triggers in Different Media. In Terry Barrett and Sarah Moore (Eds.) (2011) *New Approaches to Problem-Based Learning*, Abingdon: Routledge.
- Barrows, H. S. (1986). A taxonomy of problem-based learning methods. *Medical Education*, 20, 481-486.
- Barrows, H. S. (1996). Problem-based learning in medicine and beyond: A brief overview. In L. Wilkerson & H. Gilselaers (eds.), *Bringing problem-based learning to higher education: Theory and practice*. San Francisco, CA: Jossey-Bass Inc.
- Barrows, H. S. Tamblyn, R. M. (1980). *Problem-based learning*. New York: Springer.
- Benson, G., Noesgaard, C. and Drummond-Young, M. (2001) Facilitating small group learning. In Rideout, E. (ed.) *Transforming Nursing Education through Problem-Based Learning*. Sudbury: Mass,

- Biggs, J. and Moore, P. (1992) *The process of learning*, 3<sup>rd</sup> ed. Sydney: Prentice Hall.
- Biggs, J. and Tang, C. (2007) *Teaching for Quality Learning at University*, Maidenhead: Open University.
- Bolton, G. (2001) *Reflective Practice*, London: Sage.
- Boud, D. (ed.) (1985) *Problem-based Learning in Education for the Professions*, Sydney Higher Education Research and Development Society of Australia.
- Boyce, G. (2004) Critical Accounting education: teaching and learning outside the circle, *Critical Perspectives on Accounting*, Vol. 15, issues 4-5.
- Calas, M. and Smircich, L. (1992) Writing gender into organizational theory: directions from feminist perspectives. In M. Reed and M. Hughes (Eds.) *Re-thinking organizations: New directions in organisational theory and analysis*, London: Sage.
- Candy, P. C. (1991). *Self-direction for lifelong learning*. San Francisco, CA: Jossey Bass.
- Crotty, M. J. (1998). *Foundations of Social Research: Meaning and Perspective in the Research Process*. London: Sage.
- Cunliffe (1999) Critical Pedagogy: Reflexive Dialogical Practice in Management Learning, *Critical Management Studies Conference, University of Manchester*, 14-16 July.
- Cunliffe, A. (2002) Reflexive dialogical practice in management learning, *Management Learning*, 33(1), 35-62.
- Cunliffe, A. L. (2004) On Becoming a Critically Reflexive Practitioner, *Journal of Management Education*, Vol. 28 No. 4, pp.407-426.
- Dehler, G., Welsh, A. and Lewis, M. (2001) Critical pedagogy in the “New Paradigm”. *Management Learning*, 34(4), 493-511.
- Easton, L.D. and Guddat, K.H. (1962) (Eds. and Trans.) *Writings of the young Marx on philosophy and society*, New York: Anchor Press.
- Evensen, D. H., & Hmelo, C. E. (2001). *Problem-based learning: A research perspective on learning interaction*. Mahwah, NJ: Lawrence Erlbaum. Associates.
- Fosnot, C. T. (ed.) (1996). *Constructivism: Theory, perspectives, and practice*. New York, NY: Teachers College Press.
- Freire, P. (1970) *Pedagogy of the oppressed*. London, Penguin
- Freire, P. (1971) *Quelques idées insolites sur l'éducation*, Paris : UNESCO.
- Freire, P. (1972) *Cultural Action for Freedom*, London: Penguin.

- Freire, P. (1974) *Education: The Practice of Freedom*, London: Writers and Readers Publishing Corporation.
- Freire, P. (2001) *Pedagogy of Freedom*, Maryland: Rowan and Littlefield Publishers.
- Gagné, R. M. (1985). *The conditions of learning and theory of instruction*, 4th ed.). New York, NY: Holt, Rinehart & Winston.
- Gajardo, M. (1991) *La Concientización en América Latina: una Revisión Crítica*. Michoacán: CREFAL – OEA.
- Gustavesen, B. (1992) *Dialogue and Development*, Assen: van Gorcum.
- Hmelo, C. E., Gotterer, G. S., & Bransford, J. D. (1994). *The cognitive effects of problem-based learning: A preliminary study. Paper presented at the Annual Meeting of the American Educational Research Association*, New Orleans, LA, April 4-8.
- Hooks, B. (2010) *Teaching Critical Thinking*, London: Routledge.
- Krause, K. (2005) Engaged, inert or otherwise occupied? Deconstructing the 21<sup>st</sup> century undergraduate student. *Sharing Scholarship in Learning Symposium*, James Cooke University, 21<sup>st</sup> September 2005.
- Lähteenmäki, M-J. and Uhlin, L. (2011) Developing Reflective Practitioners through PBL in Academic and Practice Environments. In Terry Barrett and Sarah Moore (Eds.) (2011) *New Approaches to Problem-Based Learning*, Abingdon: Routledge.
- Lehman, C.R. (1989) The Importance of Being Ernst: Gender Conflicts in Accounting, *Advances in Public Interest Accounting*, Vol.3.
- Lohd, S. and Gaffikin, M. (1997) Critical Studies in Accounting Research, Rationality and Habermas: A Methodological Reflection, *Critical Perspectives on Accounting*, No.8, pp.433-474.
- McCowon, T. (2006) Approaching the political in citizenship education: The perspectives of Paulo Freire and Bernard Crick, *Educate*, Vol.6, No.1, pp. 57-70.
- Montero, M. (2000) Participation in participatory action-research, *Annual Review of Critical Psychology*, 22, pp.3-11.
- Montero, M. (2009) *Methods for Liberation: Critical Consciousness in Action*. In Maritza Montero and Christopher, C. Simon (eds.) *Psychology of Liberation*, New York: Springer.
- Myers Kelson, A. and Distlehorst, L. (2000) Groups in problem-based learning: Essential elements in theory and practice. In Evenson, D. and Hmelo, C. (eds.) *Problem-Based Learning: A Research Perspective on Learning*.
- Newman, M. (2004) *Imaginative Curriculum Guide: Problem Based Learning*, The Higher Education Academy.



- Norman, G. R., and Schmidt, H. G. (1992). The psychological basis of problem-based learning: A review of the evidence. *Academic Medicine*, 67 (9), 557-565.
- Power, M. (1991) Educating Accountants: Towards a Critical Ethnography, *Accounting Organizations and Society*, Vol.15, No. 4, pp.333-353.
- Prasad and Caproni (1997) Critical Theory in the Management Classroom: Engaging Power, Ideology, and Praxis, *Journal of Management Education*, 21(3), pp.284-291.
- Prpic, J. (2005) Managing academic change through reflexive practice: A quest for new views, *Research and Development in Higher Education*, 28, 399-406.
- Roebuck, J. (2007) Reflexive practice: To enhance student learning, *Journal of Learning Design*, Vol. 2, No.1.
- Ryan, J.W. (1974) *Paulo Freire, Literacy Through Conscientization*, International Institute for Adult Literacy Methods.
- Savery, J. R. & Duffy, T. M. (1995). Problem based learning: An instructional model and its constructivist framework. *Educational Technology*, 35 (5), 31-37.
- Savin-Baden, M. and Major, C.H. (2004) *Foundations of Problem-Based Learning*. Milton Keynes: Open University.
- Schmidt, H. G. (1983) Problem-based learning: Rationale and description. *Medicine Education*, 17, 11-16.
- Schmidt, H. and Moust, J. (2000) "Factors Affecting Small Group Tutorial Learning: A review of Research," in D. Evenson and C. Hmelo (eds.), *Problem-based Learning: A Research Perspective on Learning Interactions*. London: Lawrence Erlbaum Associates.
- Senge, P. (1990) *The fifth discipline*, London: Random House.
- Shor, I. and Freire, P. (1987) *A Pedagogy for Liberation*, Massachusetts: Bergin and Garvey Publishers.
- Steier, F. (Ed.) (1995). *Research and Reflexivity*. London: Sage Publications.
- Sullivan, G. (2005) *Art Practice as Research*, London: Sage.
- Valentin, C. (2007) How can I teach critical management in this place? A critical pedagogy for HRD: possibilities, contradictions and compromises. In *Critical Human Resource Development*, London: Prentice Hall.
- Vince, R. and Warren, S. (2011) Participatory Visual Methods. In G.Symon. and C. Cassell. (eds.) *Qualitative Organizational; Research*, London: Sage.

Water, J. (1988) cited in Baker, A., and Kolb, D.A. (1993) Diversity, Learning and Good Conversation. In R.R. Sims and R.F. Dennehy (eds.) *Diversity and Differences in Organizations*, Connecticut: Greenwood Press.